What is claimed is:

1. A circuit substrate unit for mounting a circuit element, which comprises:

a plurality of circuit substrates, each of which mounts a circuit element thereon; and

at least one heat sink member,

wherein at least one of said plurality of circuit substrate is stacked on one of the circuit substrates adjacent thereto with a space therebetween, and

said heat sink member is arranged in at least one of the spaces formed between said adjacent circuit substrates.

2. The circuit substrate unit according to claim 1,

wherein said heat sink member is disposed at least in a space abutting on a circuit substrate having, mounted thereon, a circuit element which needs to be cooled thereon, and

said circuit element which needs to be cooled is disposed on a plane of the circuit substrate having said circuit element mounted thereon, the plane facing said heat sink member.

3. The circuit substrate unit according to claim 2,

wherein said heat sink member has a plurality of

protruding portions on at least one of planes thereof facing the two circuit substrates which sandwich said heat sink member therebetween, and

the circuit element arranged on said plane which faces said heat sink member is mounted on the circuit substrate in a state where the circuit element contacts with at least one of said plurality of protruding portions.

4. The circuit substrate unit according to claim 3, further comprising:

a heat conduction member,

wherein said heat conduction member is disposed between said circuit element which needs to be cooled and said heat sink member.

5. The circuit substrate unit according to claim 4,

wherein said heat conduction member is disposed between a plane of said heat sink member which plane has no protruding portions and said circuit element which needs to be cooled, the circuit element being disposed on a plane of said circuit substrate which faces the plane of said heat sink.

6. The circuit substrate unit according to claim 4,

wherein said heat conduction member is formed in a sheet shape, and has elasticity at least in a thickness direction thereof.

7. The circuit substrate unit according to claim 3,

wherein each of said protruding portions has a flat surface on a tip end thereof.

8. The circuit substrate unit according to claim 3,

wherein at least one of said plurality of protruding portions contact with a circuit element mounted on a circuit substrate facing the protruding portions.

9. The circuit substrate unit according to claim 1,

wherein said heat sink member has a radiation fin partially provided therein.

10. A circuit substrate unit comprising:

a first circuit substrate,

a second circuit substrate,

a heat sink member; and

an electromagnetic shield member,

wherein said first circuit substrate and second circuit substrate sandwich said heat sink member and said electromagnetic shield member therebetween.

11. The circuit substrate unit according to claim 10,

wherein said first circuit substrate having, mounted thereon, a circuit element to serve as a first heat source and a

circuit element to serve as a second heat source, and

a radiation fin and a plurality of protruding portions are provided on a plane of said heat sink member facing the second circuit substrate.

12. The circuit substrate unit according to claim 11, further comprising:

heat conduction members,

wherein said circuit element to serve as the first heat source and said circuit element to serve as the second heat source respectively contact with said heat sink member via said heat conduction members, and

the heat conduction member with which said circuit element to serve as the first heat source contacts and the heat conduction member with which said circuit element to serve as the second heat source contacts are heat conduction members with different heat conductivity.

13. The circuit substrate unit according to claim 12,

wherein each of said heat conduction members is formed in a sheet shape and has elasticity at least in a thickness direction thereof.

14. The circuit substrate unit according to claim 11,

wherein a heat pipe is provided in that region of said heat

sink member with which said heat conduction member contacts.

15. The circuit substrate unit according to claim 11,

wherein said second circuit substrate has, mounted thereon, a circuit element to serve as a third heat source,

said shield member has a through hole therein, and

said circuit element to serve as the third heat source contacts with said heat sink member via said through hole.

16. The circuit substrate unit according to claim 11,

wherein said radiation fin is constituted by a plurality of fins, each of which has a side parallel to said heat sink member.

17. Electronic equipment comprising the circuit substrate unit according to claim 10.

18. Electronic equipment comprising the circuit substrate unit according to claim 11, said circuit substrate unit further comprising:

a hood portion,

wherein said hood portion is disposed at a position above said radiation fin so as to cover the radiation fin.

19. The electronic equipment according to claim 18,

wherein a casing accommodating constituent components

of the electronic equipment has an upper casing, a lower casing and a plate member partitioning said upper and lower casings, and

said circuit substrate unit is accommodated in the lower casing, and said hood portion is provided in said plate member.

20. The electronic equipment according to claim 19, further comprising:

a cooling fan,

wherein said hood portion has an opening portion facing one plane of said casing, and

a ventilation port is provided on the plane of said casing facing the opening portion of said hood portion, and said cooling fan is provided at a position abutting on a plane facing the plane of said casing.

21. The electronic equipment according to claim 17,

wherein a casing accommodating constituent components of the electronic equipment has an upper casing, a lower casing and a plate member partitioning the upper and lower casings, and

said circuit substrate unit is accommodated in the lower casing, and said plate member has a through hole therein for allowing an upper portion of said radiation fin to protrude to said upper casing.

22. The electronic equipment according to claim 19 or 21, wherein said circuit substrate unit is disposed in a region on one of left and right sides of said lower casing.

23. The electronic equipment according to claim 22, comprising: a space for accommodating related apparatuses, wherein said space is provided in the other region of said lower casing where said circuit substrate unit is arranged.